We Claim:

1. A method of reducing biofilm formation by increasing CsrA levels in a biofilm-forming bacterial strain.

2. The method of claim 1 wherein the bacterial strain is an *E. coli* strain, a *Salmonella* strain, a *Klebsiella* strain, or a related gamma proteobacteria.

3. A method of increasing biofilm formation by decreasing CsrA levels in a biofilm-forming bacterial strain.

4. The method of claim 3 in which the bacterial strain is one of an *E. coli* strain, a *-ella* strain, a *Klebsiella* strain, or a related gamma proteobacteria.

5. A method of increasing CsrB levels in a bacterial strain by increasing the levels of active UvrY in the strain.

6. The method of claim 5 wherein the bacterial strain is a biofilm-forming strain.

7. The method of claim 5 wherein levels of active UvrY in the strain are increased by increasing the expression of at least one of BarA and SdiA, increasing uvrY translation, increasing uvrY RNA translation, increasing the rate of UvrY phosphorylation, decreasing the rate of UvrY dephosphorylation, or increasing the half-life of uvrY mRNA or UvrY in the strain.

8. A method of modulating biofilm formation in a biofilm-forming bacterial strain, comprising modulating the level of active UvrY in the strain.

9. The method of claim 8 wherein the bacterial strain is an *E. coli* strain, a *Salmonella* strain, a *Klebsiella* strain, or a related gamma proteobacteria.

10. The method of claim 9 wherein the bacterial strain is an *E. coli* strain.

11. A modulator of CsrA activity in a bacterial cell, said modulator comprising an isolated nucleotide sequence containing the sequence element CAGGAUG.

12. The modulator of claim 11 wherein the sequence element is repeated between 2 and 100 times within a region of RNA no more than 1500 nucleotides long.

13. The modulator of claim 12 wherein the sequence element is repeated between 5 and 50 times.

14. The modulator of claim 13 wherein the sequence element is repeated 18 times.

15. The modulator of claim 13 wherein the sequence element is repeated 19 times.

16. Use of a modulator of claim 11 to modulate biofilm formation in a biofilm-forming bacterial strain.

17. Use of claim 16 wherein the strain is an *E. coli* strain, a *Salmonella* strain, a *Klebsiella* strain, or a related gamma proteobacteria.

18. A method of increasing biofilm formation in a biofilm-forming bacterial strain, comprising inducing in that strain increased levels of a repeated nucleotide sequence, said sequence being CAGGAUG.

19. The method of claim 18 wherein the bacterial strain is an *E. coli* strain, a *Salmonella* strain, a *Klebsiella* strain, or a related gamma proteobacteria.

20. A method of increasing biofilm formation in a biofilm-forming bacterial strain, comprising increasing BarA levels or activity in the bacterial strain.

21. The method of claim 20 wherein the bacterial strain is an *E. coli* strain, *Salmonella* strain, or a related gamma proteobacteria.

22. A method of decreasing biofilm formation in a biofilm-forming bacterial strain, comprising modulating UvrY phosphorylation.

23. A method of modulating biofilm formation in a bacterial strain, comprising modulating the expression level of uvrY in the strain.

24. The method of claim 23 herein the strain is an *E. coli* strain, *Salmonella* strain, or a related gamma proteobacteria.

25. A modulator of biofilm formation in a biofilm-forming bacterial strain, said modulator comprising an amino acid sequence selected from a portion of the amino acid sequence of CsrA shown to selectively bind RNA of biofilm-related genes under stringent conditions *in vitro*.

26. A method of modulating the expression of a RNA containing at least one of the nucleotide sequences UGCACACRRNYYGUGUGUG, UGCACACYYNRRGUGUGUG, UGCACACGGAUUGUGUGUG, and RNA sequences at least 90% homologous to at least one of these sequences, wherein Y represents a pyrimidine, R represents a purine and N represents either a purine or a pyrimidine, comprising providing an RNA binding agent specifically recognizing the sequence.

27. The method of claim 26 wherein the RNA binding agent is a peptide or protein selected from a portion of the amino acid sequence of CsrA.

28. The method of claim 27 wherein the RNA binding agent is an amino acid sequence at least 80% homologous to a region of CsrA shown to selectively bind RNA of biofilm-related genes under stringent conditions *in vitro*, which specifically binds the same nucleotide sequence with at least 50% of the affinity of the amino acid sequence.

29. A CsrA binding agent comprising a RNA containing at least one of the nucleotide sequences UGCACACRRNYYGUGUGUG, UGCACACYYNRRGUGUGUG, UGCACACGGAUUGUGUGUG, or RNA sequences at least 90% homologous to at least one of these sequences, wherein Y represents a pyrimidine, R represents a purine and N represents either a purine or a pyrimidine and a physiologically acceptable carrier.

30. A method of identifying modulators of biofilm formation, comprising identifying agents which modulate the level of CsrA in a biofilm-forming bacterial strain.

31. The method of claim 30 wherein the bacterial strain is an *E. coli* strain, *Salmonella* strain, or a related gamma proteobacteria.

32. The method of claim 30 wherein agents are identified using a reporter gene system approach to identifying inhibitors, comprising a fused nucleotide containing genetic material encoding a reporter fused to the regulatory region of the biofilm formation modulating gene of interest.

33. The method of claim 32 wherein the biofilm formation modulating gene of interest is at least one of *uvrY, csrA, sdiA, csrB*, and *barA*.

34. An inhibitor of CsrA expression, comprising an isolated nucleotide sequence containing two or more repeats of the sequence element CAGGAUG.

35. A stimulator of biofilm formation, comprising an isolated sequence nucleotide containing two or more repeats of the sequence element CAGGAUG.

36. A modulator of biofilm formation, comprising an isolated amino acid sequence selected from a portion of the amino acid sequence of CsrA.

37. A method of modulating glycogen biosynthesis and catabolism in a bacterial strain comprising modulating the level or activity of CsrA.

38. The method of claim 37 wherein the strain is an *E. coli* strain, *Salmonella* strain, or a related gamma proteobacteria.

39. A method of modulating glycogen biosynthesis in a biofilm-forming bacterial strain, comprising inducing the presence within the bacterial strain of a nucleotide having two or more repeats of the sequence CAGGAUG.

40. Use of an inhibitor of biofilm formation in improving recovery of a mammalian patient suffering from infection by bacteria forming biofilm.

41. Use of claim 40 wherein the inhibitor of biofilm formation is an inhibitor of csrB transcription.

42. Use of claim 40 wherein the bacteria is an *E. coli* bacteria, *Salmonella* bacteria, or a related gamma proteobacteria.

43. Use of claim 40 wherein the patient is a human or domestic mammal.

44. A modulator of biofilm formation in a bacterial strain, comprising an agent having an AHL binding domain and a DNA binding domain and having at least 50% of the activity of sdiA in stimulating UvrA under physiological conditions.